Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A fault-tolerant server comprising:

(a) a communications link;

(b) a first Central Processing Unit, (CPU), in electrical communication with the communications link and capable of transmitting a first information stream;

(c) a second CPU, in electrical communication with the communications link and capable of transmitting a second information stream;

(d) a first Input/Output (I/O) subsystem, in electrical communication with the first CPU, the second CPU and the communications link, configured to compare the first information stream and the second information stream;

(e) a second Input/Output (I/O) subsystem in electrical communication with the first CPU, the second CPU and the communications link, configured to compare the first information stream and the second information stream;

(f) a first local mass storage device in electrical communication with both the first CPU and the second CPU, and

(g) a second local mass storage device in electrical communication with both the first CPU and the second CPU,

wherein the first I/O subsystem is configured to selectively access the first local mass storage device based upon its comparison of the first and second information streams.

2. (Previously Presented) The fault-tolerant server of claim 1, wherein the second I/O subsystem is configured to selectively access the second local mass storage device based upon its comparison of the first and second information streams.

3. (Previously Presented) The fault-tolerant server of claim 2 wherein the first CPU can access the second local mass storage device through the second I/O subsystem.

4. (Previously Presented) The fault-tolerant server of claim 2 wherein the communications link further comprises a first switching fabric in electrical communication with the first CPU.

5. (Previously Presented) The fault-tolerant server of claim 4 wherein the first switching fabric is in electrical communication with both the first I/O subsystem and the second I/O subsystem.

6. (Previously Presented) The fault-tolerant server of claim 5 wherein a second switching fabric is in electrical communication with the second CPU, the first I/O subsystem and the second I/O subsystem.

7. (Previously Presented) The fault-tolerant server of claim 2 wherein each switching fabric further comprises a delay module to buffer and delay transmission of at least one of the first and second information streams.

8. (Original) The fault-tolerant server of claim 1 wherein the communications link comprises a backplane.

9. (Original) The fault-tolerant server of claim 8 wherein the communications link further comprises a backplane link in communication with the backplane.

10. (Previously Presented) The fault-tolerant server of claim 1 wherein the first CPU and the second CPU further comprise a 1U rack-mount motherboard.

11. (Previously Presented) The fault-tolerant server of claim 2, wherein the first local mass storage device is located on a same motherboard as the first CPU.

12. (Previously Presented) The fault-tolerant server of claim 2, wherein each I/O subsystem is configured to issue a stop command to at least one of the first and the second processors upon detecting a discrepancy between the first and second information streams.

13. (Currently Amended) A method for storing data in a fault-tolerant server, the method comprising the steps of:

(a) establishing communication between a first CPU, a communications link, a first I/O subsystem and a second I/O subsystem;

(b) establishing communication between a second CPU, the communications link, the first I/O subsystem and the second I/O subsystem;

(c) at each of the first and second I/O subsystems, comparing information streams transmitted by the first and the second CPUs over the communications link;

(d) if the information streams are determined to be different by either the first I/O subsystem or the second I/O subsystem, issuing a stop command;

(e) otherwise, storing data from the information stream on both a first mass storage device local to the first I/O subsystem and a second mass storage device local to the second I/O subsystem; and

(f) if the first CPU fails, allowing the second CPU to access the first mass storage device through the first I/O subsystem.

14. (Cancelled).

15. (Currently Amended) The method of claim ~~14~~ 13 further comprising:

~~(h)~~ (g) if the second CPU fails, allowing the first CPU to access the second mass storage device through the second I/O subsystem.

16. (Previously Presented) The method of claim 13 further comprising the step of allowing either CPU to access both the first and the second mass storage devices.

17. (Previously Presented) The method of claim 16 wherein the first CPU may only access the second mass storage device upon the failure of the first mass storage device.

18. (Original) The method of claim 13 further comprising the step of communicating with a 1U rack-mount motherboard.

19. (Previously Presented) The method of claim 13 wherein the first I/O-subsystem and the second I/O subsystem are connected via a switching fabric.

20. (Previously Presented) The method of claim 13 further comprising the step of buffering and delaying first and second information streams.

21. (Previously Presented) An apparatus for accessing at least one of a first local mass storage device and a second local mass storage device in a fault-tolerant server, the apparatus comprising:

(a) a means for establishing communication between a first CPU and a first local mass storage device capable of transmitting a first information stream;

(b) a means for establishing communication between a second CPU and a second local mass storage device capable of transmitting a second information stream;

(c) a first Input/Output (I/O) subsystem means, in communication with the first CPU and the first local mass storage device, configured to compare the first information stream and the second information stream;

(d) a means for accessing, by the first I/O subsystem, the first local mass storage device in response to a comparison of the first and second information streams;

(e) a means for directly accessing, by the first CPU, the second local mass storage device in the event of a failure of the first local mass storage device.

22. (Previously Presented) The method of claim 13 further comprising the step of executing instructions on the second CPU in lockstep with the first CPU.

23. (Cancelled).

24. (Cancelled).